

WIND VANE

This interactive meteorology experiment can inspire children to engage in gathering data and making forecasts.

INSTRUCTIONS

STEP 1: Mark North, South, East, and West on your plate.

STEP 2: Poke a hole through the middle of the place with your pencil.

STEP 3: Attach your straw to the top of the pencil using the nail so the straw will spin.

STEP 4: Using scissors, snip each end of the straw.

STEP 5: Use the template to create a tail and arrow out of card stock and attach to the end of the straw.

STEP 6: Take your weather vane outside and record your observations!

SUPPLIES

Template
Paper plate
Pencil
Straw
Card stock
Scissors
Nail
Marker

THE SCIENCE

A weather vane is like a special arrow on a stick that tells us which way the wind is blowing. When the wind blows, it pushes on the arrow. The arrow turns and points in the direction where the wind is coming from. So, if the arrow points to the barn, that means the wind is blowing from the barn to where you are. It helps us know which way the wind is going.

Weather vanes are typically mounted on rooftops or other elevated structures to accurately show the wind's direction. They are not affected by wind speed, only its direction. This basic principle of wind pressure and rotation allows people to easily determine the wind direction, which is valuable information for understanding weather patterns and making practical decisions, such as sailing, farming, or simply gauging local weather conditions.

Wind Vane Observations

Use this worksheet to process and evaluate your work.



What do you predict will happen to the wind vane?

What did you see?

Did the wind change direction? If so, how could you tell?

Record your observations for a week.

Did it blow in one direction more often than others?

What did you learn about the wind?



